

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: :
Bruce R. Smith et al. : Examiner: E. Kim
U.S. Serial No. 09/453,498 : Group Art Unit: 3721
Filed December 3, 1999 :
Docket No. 2165 (GP-03-8) (old 013550-069) :
For: FOOD SERVING PAPERBOARD :
CONTAINER PRESSING APPARATUS :
EMPLOYING CAST-IN ELECTRICAL :
HEATERS :

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REMARKS ACCOMPANYING REQUEST FOR CONTINUED EXAMINATION
UNDER 37 CFR 1.114

Sir:

Applicant submits the following remarks and accompanying *Declaration of Mark B. Littlejohn* in response to the *Final Rejection* of February 10, 2004.

REMARKS

In the Office Action of February 10, 2004, Claims 1-21 and 23-28 were finally rejected and Claim 22 was allowed. These remarks accompany a *Request for Continued Examination Under 37 CFR 1.114* and a *Declaration of Mark B. Littlejohn* responsive to the Office Action.

The Examiner has stated that the rejected claims are obvious over United States Patent No. 4,721,500 of *Van Handel et al.* in view of United States Patent No. 6,029,730 to *Gospe et al.* *Van Handel et al.* '500 relates to the manufacture of paperboard containers, whereas *Gospe et al.* '730 does not. The selection urged by the Examiner is rebutted by the enclosed *Declaration of Mark B. Littlejohn*, in part because *Gospe et al.* '730 does not relate in any way to reciprocating pressware where durability is important and in part because of the unexpected results seen, including much lower heater operating temperatures.

The present invention discloses a pressing apparatus with cast-in heaters, Claim 1 being illustrative:

1. A pressing apparatus for producing from a paperboard blank a food service paperboard container having an overturned rim provided with folds, comprising:

a first die that includes a first base and a first platform movable with respect to the first base, said first base having a curved surface for engaging an outer periphery of a paperboard blank;

a second die positioned in opposing relation to the first die and including a second base and a second platform movable with respect to the second base, said second die being movable with respect to the first die, said second base having a curved surface for mating with the curved surface on the first die and engaging the outer periphery of the paperboard blank so that the outer periphery of the paperboard blank is pressed between the curved surface of the first base and the curved surface of the second base;

a first cast-in heater mounted within a recess in the first die, the first cast-in heater including a resistor wire embedded within a thermally conductive cast-in material; and

a second cast-in heater mounted within a recess in the second die, the second cast-in heater including a resistor wire embedded within a thermally conductive cast-in material.

Van Handel et al. '500 does not disclose cast-in heaters and *Gospe et al.* '730 teaches that cast-in heaters are one of many possible options for thermoelectric devices:

It will be appreciated by persons of ordinary skill in the relevant arts that the foil heater 62 could be replaced with various heating elements such as an array of thermoelectric devices, a cable heater, a cartridge heater, a cast-in heater, or the like. Each replacement would provide functionally similar heating properties and capabilities as the foil heater 62.

Gospe et al. '730, Col. 4, lines 48-53.

The combination of references relied upon in the outstanding rejection is contrary to the evidence of unexpected results especially the enclosed *Declaration of Mark B. Littlejohn*, which supplements the *Declaration of Dana Markwell* submitted in 2002. The new *Declaration* also provides additional evidence of commercial success since 2002. Salient points include the following:

1. Cast-in heaters are much more expensive than conventional ring heaters, their inclusion in a pressing apparatus is accordingly not *prima facie* obvious;
2. The durability of the heaters is remarkable, clearly warranting allowance of the claims in this case in any event; and
3. The cast-in heaters operate at much lower temperatures for a given forming surface temperature; another unexpected advantage.

For the above reasons the claims should be allowed specifically in view of
MPEP §2143.01:

**FACT THAT THE CLAIMED INVENTION IS WITHIN THE
CAPABILITIES OF ONE OF ORDINARY SKILL IN THE ART IS NOT
SUFFICIENT BY ITSELF TO ESTABLISH *PRIMA FACIE*
OBVIOUSNESS**

A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000) (Court reversed obviousness rejection involving technologically simple concept because there was no finding as to the principle or specific understanding within the knowledge of a skilled artisan that would have motivated the skilled artisan to make the claimed invention); *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references.).

MPEP §2143.01, 4th heading

Indeed, *Gospe et al.* '730 teaches away from the claimed invention because it states that all heaters are equivalent.

It is also believed that inasmuch as the references do not even suggest the problem, much less a solution, the factual basis required by *In re Lee* to establish obviousness, *prima facie*, has not been met. In particular, the motivation to combine in the manner urged by the Examiner must appear in the references:

In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."); *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references").

With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.

Deferential judicial review under the Administrative Procedure Act does not relieve the agency of its obligation to develop an evidentiary basis for its findings. To the contrary, the Administrative Procedure Act reinforces this obligation. See, e.g., *Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Ins. Co.*, 463 U.S. 29, 43 (1983) ("the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.") (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)); *Securities & Exchange Comm'n v. Chenery Corp.*, 318 U.S. 80, 94 (1943) ("The orderly function of the process of review requires that the grounds upon which the administrative agency acted are clearly disclosed and adequately sustained.").

In re Lee, 61 USPQ2d 1430, 1434 (CAFC 2002)

Also noted is *In re Soni*, 34 USPQ2d 1684, 1687 and following (CAFC 1995), where it is stated Declaration evidence of unexpected results suffices for purposes of nonobviousness:

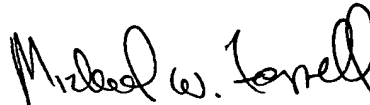
Mere improvement in properties does not always suffice to show unexpected results. In our view, however, when an applicant demonstrates substantially improved results, as Soni did here, and states that the results were unexpected, this should suffice to establish unexpected results in the absence of evidence to the contrary. Soni, who owed the PTO a duty of candor, made such a showing here. The PTO has not provided any persuasive basis to question Soni's comparative data and assertion that the demonstrated results were unexpected. Thus, we are persuaded that the Board's finding that Soni did not establish unexpected results is clearly erroneous.

The cases cited by the dissent are not to the contrary. Neither *De Blauwe*, nor *Wood*, nor *Lindner* requires a showing of unexpectedness separate from a

showing of significant differences in result. Nor does Merck, which involved compositions understood to differ only in "a matter of degree." Those are not the facts here, where substantially improved properties were shown. Given a presumption of similar properties for similar compositions, substantially improved properties are ipso facto unexpected. The difficulty postulated by the dissent in distinguishing substantial from insubstantial improvement is no greater than the PTO and the courts have encountered, successfully, for many years in making judgments on the question of obviousness. It is not unworkable; it is simply the stuff of adjudication. Nor does it change established burdens of proof. The PTO here established a prima facie case, the applicant responded to it with a showing of data, and the PTO made an inadequate challenge to the adequacy of that showing.

In view of the foregoing remarks and enclosed Declaration of Mark B. Littlejohn, this application is believed in condition for allowance. Such action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael W. Ferrell". The signature is fluid and cursive, with the first name "Michael" and last name "Ferrell" being clearly legible despite the cursive style.

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